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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,172	02/22/2006	Jonathan R. Piesing	GB030153	7875
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EXAMINER				
CHOKSHI, PINKAL R				
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2425				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/569,172

Applicant(s)

PIESING, JONATHAN R.

Examiner

Pinkal R. Chokshi

Art Unit

2425

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/3/2011 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection. See the new rejection below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim element "means for receiving", "means for monitoring", "means for restarting" are a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding

structure, material, or acts for the claimed function. In the specification, several paragraphs mention receiving, monitoring, restarting. However, the specification does not teach how it is being done or there is no corresponding algorithm disclosed for these functions.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-5, 7-12, and 14-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over US PG Pub 2003/0079225 to Piesing et al (hereafter referenced as Piesing) in view of US PG Pub 2004/0034875 to Bulkowski et al (hereafter referenced as Bulkowski) and US Patent 7,634,787 to Gebhardt (hereafter referenced as Gebhardt).

Regarding **claim 1**, “a method of monitoring a broadcast signal” reads on the method where the broadcast signal is monitored for an identification signal (abstract) disclosed by Piesing and represented in Fig. 1.

As to “the method comprising receiving, by an end user device, a broadcast signal including at least three components” Piesing discloses (¶0019, ¶0024) that the broadcast signal (28), generated by broadcaster and received by end user device, includes a video component, an audio component, and a data component as represented in Fig. 1 (elements 18, 20, 22).

As to “monitoring the broadcast signal for an identification signal” Piesing discloses (¶0021 and ¶0024) that the identification signal included in broadcast signal is monitored by the receiver for the presence of the identification signal.

As to "pausing the received timebase to accommodate at least interactive applications, if the identification signal is not present" Piesing discloses (§0019) that the broadcast signal transmitted to end user device includes a data component signal, which is in form of an interactive application as represented in Fig. 1 (element 22). Piesing further discloses (§0025, §0028) that when identification signal is not present in broadcast signal, receiver interrupts by pausing an internal timebase of the interactive application.

As to "the broadcast signal including a timebase" Piesing discloses (§0020) that the interactive application transmitted to receiver is part of the data portion that is part of the broadcast signal. Piesing further discloses (§0025) that the possible interruption includes pausing an internal timebase received in receiver.

As to "restarting the received timebase when the identification signal is present" Piesing discloses (§0025) that the interruption will be suspended when the identification signal is returned.

Piesing meets all the limitations of the claim except "a timebase is included in the broadcast signal and pausing the timebase, wherein said timebase is a periodic clock inserted into one of the three components." However, Bulkowski discloses (§0039, §0069, §0070, claim 2) that the time pulses (periodic clock) is combined with the data-substream, which is a part of MPEG/data stream. Bulkowski further discloses (§0081-§0083) that the time base, associated with the data sub-stream, is transmitted to the client device as

represented in Fig. 5. Bulkowski also discloses (§0070) that the timing information transmitted with the data stream to the client device includes time pulses, which delivered regularly to the client and consist of the current time on the stream's time base. Bulkowski also discloses (§0074-§0076) that the time base associated with data stream is paused. Bulkowski further discloses (TABLE 1) that the pauseTime is time in seconds at which the enhancement should be paused, and all UI (user interface) made invisible to the user.

As to "restarting the timebase" Bulkowski discloses (§0083) that the client device recreates the time base associated with the data stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing's system by pausing time base as taught by Bulkowski in order to run interactive application correctly on a viewer's screen so the viewer has a great deal of control over what appears on screen (§0004, §0012).

Combination of Piesing and Bulkowski meets all the limitations of the claim except "pausing timebase at unspecified time intervals and restarting the received timebase when the identification signal is present such that at least two of the three components are synchronized with the interactive applications." However, Gebhardt discloses (col.5, lines 4-33; col.14, lines 4-64) that the execution of the interactive application is suspended; after a commercial is completed, execution of the interactive application is resumed and began from the same state information it had when the commercial began. Gebhardt further

discloses (col.10, lines 19-24; col.13, lines 54-61) that in response to control signals, execution of an interactive application, such as starting or pausing application, is generated to effect the synchronous execution of the television shows and broadcast programs. Gebhardt also discloses (col.7, lines 59-61; col.11, lines 57-65) that the control signals are embedded in real time into the broadcast data. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing and Bulkowski's systems by pausing and restarting the timebase that accommodate interactive application as taught by Gebhardt in order to display/terminate appropriate interactivity for broadcast programs (col.5, lines 30-33; col.13, lines 59-61).

Regarding **claim 2**, "a method wherein the broadcast signal comprises a video component, an audio component, and a data component" Piesing discloses (§0019) that the audio, video and data components are multiplexed in multiplexer as represented in Fig. 1 (elements 18, 20, 22).

Regarding **claim 3**, "a method wherein the timebase is a portion of the data component of the broadcast signal" Piesing discloses (§0020) that the interactive application transmitted to receiver is part of the data portion that is part of the broadcast signal. Piesing further discloses (§0025) that the possible interruption includes pausing an internal timebase received in receiver. Piesing does not explicitly teach that the timebase is a periodic clock inserted into the

data component. However, Bulkowski discloses (§§0069, §0070, §0083, §0087) that the timing information consists of time pulses that are combined with the data sub-stream (data component) as represented in Fig. 5. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing's system by pausing time base as taught by Bulkowski in order to run interactive application correctly on a viewer's screen so the viewer has a great deal of control over what appears on screen (§0004, §0012).

Regarding **claim 4**, "a method wherein the broadcast signal is a digital signal and the identification signal is present in the data component of the broadcast signal" Piesing discloses (§0010) that the broadcast signal is a digital signal. Piesing further discloses (§0019) that the identification signal is produced by device 26 with data component and other data to generate broadcast signal.

Regarding **claim 5**, "a method wherein the broadcast signal is an analogue signal and the identification signal is present in the vertical blanking interval of the broadcast signal" Piesing discloses (§0029) that the broadcast signal is an analog signal with the identification signal is presented in VBI of the broadcast signal.

Regarding **claim 7**, "a method wherein the identification signal is present

in the normal data structures describing the video component of the broadcast signal" Piesing discloses (§0021, §0024, §0025) that the identification signal is carried in the video signal which describes its component by above mentioned operation.

Regarding **claim 8**, "An apparatus for monitoring a broadcast signal" reads on the receiver where the broadcast signal is monitored for an identification signal (abstract) disclosed by Piesing and represented in Fig. 1.

As to "the apparatus comprising receiving means for receiving the broadcast signal, the broadcast signal including at least three components" Piesing discloses (§0019, §0024) that the broadcast signal (28), generated by broadcaster and received by end user device, includes a video component, an audio component, and a data component as represented in Fig. 1 (elements 18, 20, 22).

As to "monitoring means for monitoring the broadcast signal for an identification signal" Piesing discloses (§0021 and §0024) that the identification signal included in broadcast signal is monitored by the receiver for the presence of the identification signal.

As to "for pausing, to accommodate at least interactive application, the received timebase if the identification signal is not present" Piesing discloses (§0019) that the broadcast signal transmitted to end user device includes a data component signal, which is in form of an interactive application as represented in

Fig. 1 (element 22). Piesing further discloses (§§0025, §§0028) that when identification signal is not present in broadcast signal, receiver interrupts by pausing an internal timebase of the interactive application.

As to “the broadcast signal including a timebase” Piesing discloses (§§0020) that the interactive application transmitted to receiver is part of the data portion that is part of the broadcast signal. Piesing further discloses (§§0025) that the possible interruption includes pausing an internal timebase received in receiver.

As to “restarting means for restarting the received timebase when the identification signal is present” Piesing discloses (§§0025) that the interruption will be suspended when the identification signal is returned.

Piesing meets all the limitations of the claim except “a timebase is included in the broadcast signal and pausing the timebase, wherein said timebase is a periodic clock inserted into one of the three components.” However, Bulkowski discloses (§§0039, §§0069, §§0070, claim 2) that the time pulses (periodic clock) is combined with the data-substream, which is a part of MPEG/data stream. Bulkowski further discloses (§§0081-§§0083) that the time base, associated with the data sub-stream, is transmitted to the client device as represented in Fig. 5. Bulkowski also discloses (§§0070) that the timing information transmitted with the data stream to the client device includes time pulses, which delivered regularly to the client and consist of the current time on the stream's time base. Bulkowski also discloses (§§0074-§§0076) that the time

base associated with data stream is paused. Bulkowski further discloses (TABLE 1) that the pauseTime is time in seconds at which the enhancement should be paused, and all UI (user interface) made invisible to the user. As to "restarting the timebase" Bulkowski discloses (§0083) that the client device recreates the time base associated with the data stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing's system by pausing time base as taught by Bulkowski in order to run interactive application correctly on a viewer's screen so the viewer has a great deal of control over what appears on screen (§0004, §0012).

Combination of Piesing and Bulkowski meets all the limitations of the claim except "pausing timebase at unspecified time intervals and restarting the received timebase when the identification signal is present such that at least two of the three components are synchronized with the interactive applications." However, Gebhardt discloses (col.5, lines 4-33; col.14, lines 4-64) that the execution of the interactive application is suspended; after a commercial is completed, execution of the interactive application is resumed and began from the same state information it had when the commercial began. Gebhardt further discloses (col.10, lines 19-24; col.13, lines 54-61) that in response to control signals, execution of an interactive application, such as starting or pausing application, is generated to effect the synchronous execution of the television shows and broadcast programs. Gebhardt also discloses (col.7, lines 59-61;

col.11, lines 57-65) that the control signals are embedded in real time into the broadcast data. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing and Bulkowski's systems by pausing and restarting the timebase that accommodate interactive application as taught by Gebhardt in order to display/terminate appropriate interactivity for broadcast programs (col.5, lines 30-33; col.13, lines 59-61).

Regarding **claim 9**, "apparatus wherein the signal comprises a video component, an audio component, and a data component" Piesing discloses (§0019) that the audio, video and data components are multiplexed in multiplexer as represented in Fig. 1 (elements 18, 20, 22).

Regarding **claim 10**, "apparatus wherein the timebase is a portion of the data component of the broadcast signal" Piesing discloses (§0020) that the interactive application transmitted to receiver is part of the data portion that is part of the broadcast signal. Piesing further discloses (§0025) that the possible interruption includes pausing an internal timebase received in receiver. Piesing does not explicitly teach that the timebase is a periodic clock inserted into the data component. However, Bulkowski discloses (§0069, §0070, §0083, §0087) that the timing information consists of time pulses that are combined with the data sub-stream (data component) as represented in Fig. 5. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the

invention to modify Piesing's system by pausing time base as taught by Bulkowski in order to run interactive application correctly on a viewer's screen so the viewer has a great deal of control over what appears on screen (§0004, §0012).

Regarding **claim 11**, "apparatus wherein the receiving means and the monitoring means are portions of an integrated circuit" Piesing discloses (§0026) that the receiving means and monitoring means are part an integrated circuit.

Regarding **claim 12**, "apparatus wherein the apparatus is a digital television receiver" Piesing discloses (§0023) that the apparatus is a receiver as represented in Fig. 1 (element 34).

Regarding **claim 14**, "the method according to claim 1, wherein the pausing step occurs due to insertion of additional information in the broadcast signal" Piesing discloses (§0022, §0025) that the distributor inserts the additional information in the broadcast signal where the interruptions occurs of the interactive application as represented in Fig. 1 (elements 28, 30, 32).

Regarding **claim 15**, "the method according to claim 14, wherein the additional information is advertisements" Piesing discloses (§0022, §0025) that the distributor inserts commercials in the broadcast signal.

Regarding **claim 17**, “the apparatus according to claim 8, wherein the pausing of the monitoring means occurs due to insertion of additional information in the broadcast signal” Piesing discloses (§0022, §0025) that the distributor inserts the additional information in the broadcast signal where the interruptions occurs of the interactive application as represented in Fig. 1 (elements 28, 30, 32).

Regarding **claim 18**, “the apparatus according to claim 17, wherein the additional information is advertisements” Piesing discloses (§0022, §0025) that the distributor inserts commercials in the broadcast signal.

8. **Claims 16 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Piesing in view of Bulkowski and Gebhardt as applied to claims 14 and 17 above, and further in view of US PG Pub 2009/0320073 to Reisman (hereafter referenced as Reisman).

Regarding **claim 16**, combination of Piesing, Bulkowski, and Gebhardt meets all the limitations of the claim except “the method according to claim 14, wherein the additional information is unannounced weather updates.” However, Reisman discloses (§0123, §0528) that the broadcast signal received at the receiver includes alerting service such as emergency broadcast system, news alerts, financial alerts, weather, etc. Therefore, it would have been obvious to

one of the ordinary skills in the art at the time of the invention to modify Piesing, Bulkowski, and Gebhardt's systems by inserting weather updates in the broadcast signal as taught by Reisman so the user can be alerted about the emergency information.

Regarding **claim 19**, combination of Piesing, Bulkowski, and Gebhardt meets all the limitations of the claim except "the apparatus according to claim 17, wherein the additional information is unannounced weather updates." However, Reisman discloses (¶0123, ¶0528) that the broadcast signal received at the receiver includes alerting service such as emergency broadcast system, news alerts, financial alerts, weather, etc. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Piesing, Bulkowski, and Gebhardt's systems by inserting weather updates in the broadcast signal as taught by Reisman so the user can be alerted about the emergency information.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6,530,084 to Del Sesto
- US PG Pub 2005/0015802 to Masson

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian T Pendleton/
Supervisory Patent Examiner, Art Unit 2425

/Pinkal Chokshi/
Examiner, Art Unit 2425